REMARKS:

Claims 1-3, 7-14, 18-25, and 29-35 are currently pending in the application.

Claims 5, 16, and 27 are currently canceled *without prejudice*, herewith.

Claims 4, 6, 15, 17, 26, and 28 have been previously canceled without prejudice.

Claims 5, 7, 16, 18, 27, and 29 stand objected to as being dependent upon a rejected base claim.

Claims 1-3, 5, and 7-11 stand rejected under 35 U.S.C. § 101.

Claims 1, 3, 9-12, 14, 20-23, 25, and 31-35 stand rejected under 35 U.S.C. § 102(e) over U.S. Patent No. 6,895,383 to Heinrich ("Heinrich").

Claims 2, 13, and 24 stand rejected under 35 U.S.C. § 103(a) over *Heinrich* in view of U.S. Patent Publication No. 2003/0061246 to Bowman, et al. ("Bowman").

Claims 10, 19, and 30 stand rejected under 35 U.S.C. § 103(a) over *Heinrich* in view of the Examiner's Official Notice.

Initially, the Applicants respectfully note that *Heinrich*, which issued on 17 May 2005, was filed on 29 March 2002. The subject Application was filed on 5 November 2001. Therefore, *Heinrich* is not valid prior art. Although *Heinrich* claims priority to provisional application no. 60/279,987, filed on 29 March 2001, the provisional application does not contain all of the Figures or disclosure of *Heinrich*, which issued on 17 May 2005, was filed on 29 March 2002, therefore, *Heinrich* is not valid prior art

In addition, the Applicants believe, that the Applicants will be able to satisfy the requirements of 37 C.F.R § 131 by filing a declaration showing a completion of the present invention prior to 29 November 2001, and respectfully reserve Applicants right to do so in the future during the pendency of the subject Application. The Applicants also believe, however, that the present invention is not disclosed or fairly suggested by *Heinrich*, and therefore, transverses the rejection of the Applicants Claims for the reasons recited below.

The Applicants respectfully submit that all of the Applicants arguments and

amendments are without prejudice or disclaimer. In addition, the Applicants have merely

discussed example distinctions from the cited prior art. Other distinctions may exist, and

as such, the Applicants reserve the right to discuss these additional distinctions in a future

Response or on Appeal, if appropriate. The Applicants further respectfully submit that by

not responding to additional statements made by the Examiner, the Applicants do not

acquiesce to the Examiner's additional statements. The example distinctions discussed by

the Applicants are considered sufficient to overcome the Examiner's rejections. In

addition, the Applicants reserve the right to pursue broader claims in this Application or

through a continuation patent application. No new matter has been added.

ALLOWABLE SUBJECT MATTER:

Claims 5, 7, 16, 18, 27, and 29 stand objected to as being dependent upon a

rejected base claim.

Specifically, the Examiner states that "Claims 5, 7, 16, 18, 27, and 29 are objected

to as being dependent upon a rejected base claim, but would be allowable if rewritten in

independent form including all of the limitations of the base claim and any intervening

claims." (4 June 2007 Office Action, Page 3). The Applicants greatly appreciate the

Examiner acknowledging that Claims 5, 7, 16, 18, 27, and 29 contain allowable subject

matter.

In response to the Examiner's statement, the Applicants have amended

independent Claim 1 by merging dependent Claim 5 into independent Claim 1 and

canceling dependent Claim 5. In addition, the Applicants have amended independent

Claim 12 by merging dependent Claim 16 into independent Claim 12 and canceling

dependent Claim 16. Furthermore, the Applicants have amended independent Claim 23

by merging dependent Claim 27 into independent Claim 23 and canceling dependent

Claim 27.

Response to Office Action Attorney Docket No. 020431.1055 Serial No. 09/992,283 Page 18 of 29 The Applicants respectfully submit that amended independent Claims 1, 12, and 23

contain patentable subject matter over Heinrich. Heinrich does not teach, suggest, or

even hint at the unique and novel limitations disclosed in amended independent Claims 1,

12, and 23. This being the case and as acknowledged by the Examiner, amended

independent Claims 1, 12, and 23 present patentable subject matter over Heinrich. (4

June 2007 Office Action, Page 3).

Furthermore, with respect to dependent Claims 2, 3, 7-11, 13, 14, 18-22, 24, 25,

and 29-33: Claims 2, 3, and 7-11 depend from amended independent Claim 1; Claims 13,

14, and 18-22 depend from amended independent Claim 12; and Claims 24, 25, and 29-

33 depend from amended independent Claim 23 are also considered patentably

distinguishable over Heinrich. Thus, dependent Claims 2, 3, 7-11, 13, 14, 18-22, 24, 25,

and 29-33 are considered to be in condition for allowance for at least the reason of

depending from an allowable claim.

REJECTION UNDER 35 U.S.C. § 101:

Claims 1-3, 5, and 7-11 stand rejected under 35 U.S.C. § 101 as allegedly being

directed towards non-statutory subject matter. The Applicants respectfully disagree.

Nonetheless, the Applicants have amended independent Claim 1 to further clarify

that this claim is directed to patentable subject matter. The Applicants further respectfully

submit that this amendment is not considered narrowing or necessary for patentability. By

making this amendment, the Applicants do not indicate agreement with or acquiescence to

the Examiner's position with respect to the rejections of Claims 1-3, 5, and 7-11 under 35

U.S.C. § 101, as set forth in the Office Action.

The Applicants respectfully submit that amended independent Claim 1 is directed to

statutory subject matter and is considered to be in full compliance with the requirements of

35 U.S.C. § 101. The Applicants further respectfully submit that amended independent

Claim 1 is in condition for allowance.

Response to Office Action Attorney Docket No. 020431.1055 Serial No. 09/992,283 With respect to dependent Claims 2, 3, 5, and 7-11, these claims depend from

amended independent Claim 1. As mentioned above, amended independent Claim 1 is

considered to be in full compliance with the requirements of 35 U.S.C. § 101. Thus,

dependent Claims 2, 3, 5, and 7-11 are considered to be in condition for allowance for at

least the reason of depending from an allowable claim. Thus, the Applicants respectfully

request that the rejection of Claims 1-3, 5, and 7-11 under 35 U.S.C. § 101 be

reconsidered and that Claims 1-3, 5, and 7-11 be allowed.

In addition, the Applicants respectfully request that the Examiner call the

undersigned, Steven J. Laureanti, at (480) 830-2700, if the Examiner has additional

comments or suggestions to the 35 U.S.C. § 101 rejection of the subject Application or if

the Examiner believes it would be easier to discuss the 35 U.S.C. § 101 rejection over the

telephone.

REJECTION UNDER 35 U.S.C. § 102(e):

Claims 1, 3, 9-12, 14, 20-23, 25, and 31-35 stand rejected under 35 U.S.C. §

102(e) over Heinrich.

As discussed above, the Applicants respectfully reserve the right to satisfy the

requirements of 37 C.F.R § 131 by filing a declaration showing a completion of the present

invention prior to 29 November 2001, in the future during the pendency of the subject

Application. However, the Applicants believe that the present invention is not disclosed or

fairly suggested by Heinrich, and therefore, transverses the rejection of Claims 1, 3, 9-12,

14, 20-23, 25, and 31-35 for the reasons recited below.

The Applicants respectfully submit that the *amendments to independent Claims*

1, 12, 23 and 34 have rendered moot the Examiner's rejection of these claims and

the Examiner's arguments in support of the rejection of these claims. The

Applicants further respectfully submit that amended independent Claims 1, 12, 23, and 34

in their current amended form contain unique and novel limitations that are not taught,

suggested, or even hinted at in Heinrich. In addition, the Applicants respectfully submit

Response to Office Action Attorney Docket No. 020431.1055 Serial No. 09/992,283 Page 20 of 29 that Heinrich fails to disclose, teach, or suggest each and every limitation recited of Claims

1, 3, 9-12, 14, 20-23, 25, and 31-35. The Applicants further respectfully submit that

Claims 1, 3, 9-12, 14, 20-23, 25, and 31-35 patentably distinguish over Heinrich. Thus, the

Applicants respectfully traverse the Examiners rejection of Claims 1, 3, 9-12, 14, 20-23,

25, and 31-35 under 35 U.S.C. § 102(e) over Heinrich.

The Applicants Claims are Patentable over *Heinrich*

Independent Claims 12, 23, 34, and 35 are considered patentably distinguishable

over Heinrich for at least the reasons discussed above in connection with independent

Claim 1.

Furthermore, with respect to dependent Claims 9, 11, 15, 20, 22, 26, 31, and 33:

Claims 4, 9, and 11 depend from amended independent Claim 1; Claims 15, 20, and 22

depend from amended independent Claim 12; and Claims 26, 31, and 33 depend from

amended independent Claim 23 are also considered patentably distinguishable over

Heinrich. Thus, dependent Claims 4, 9, 11, 15, 20, 22, 26, 31, and 33 are considered to

be in condition for allowance for at least the reason of depending from an allowable claim.

Thus, for at least the reasons set forth herein, the Applicants respectfully submit

that independent Claims 1, 12, 23, 34, and 35 and dependent Claims 4, 9, 11, 15, 20, 22,

26, 31, and 33 are not anticipated by *Heinrich*. The Applicants further respectfully submit

that independent Claims 1, 12, 23, 34, and 35 and dependent Claims 4, 9, 11, 15, 20, 22,

26, 31, and 33 are in condition for allowance. Thus, the Applicant respectfully requests

that the rejection of Claims 1, 4, 9, 11, 12, 15, 20, 22, 23, 26, 31, 33, and 33-35 under 35

U.S.C. § 102(e) be reconsidered and that Claims 1, 4, 9, 11, 12, 15, 20, 22, 23, 26, 31, 33,

and 33-35 be allowed.

THE LEGAL STANDARD FOR ANTICIPATION REJECTIONS UNDER 35 U.S.C. § 102:

The following sets forth the legal standards for "anticipation."

Response to Office Action Attorney Docket No. 020431.1055 Serial No. 09/992,283 The events that can lead to anticipation can be divided into the following seven

categories, all defined by statute:

1. <u>Prior Knowledge</u>: The invention was publicly known in the United States

before the patentee invented it.

2. <u>Prior Use</u>: The invention was publicly used in the United States either (i)

before the patentee invented it; or (ii) more than one year before he filed his patent

application.

3. Prior Publication: The invention was described in a printed publication

anywhere in the world either (i) before the patentee invented it; or (ii) more than one year

before he filed his patent application.

4. Prior Patent: The invention was patented in another patent anywhere in the

world either (i) before the patentee invented it; or (ii) more than one year before he filed his

application.

5. On Sale: The invention was on sale in the United States more than one

year before the patentee filed his application.

6. Prior Invention: The invention was invented by another person in the United

States before the patentee invented it, and that other person did not abandon, suppress or

conceal the invention.

7. Prior U.S. Patent: The invention was described in a patent granted on a

patent application filed in the United States before the patentee made the invention.

Each of those seven events has its own particular requirements, but they all have

the following requirements in common:

1. Anticipation must be shown by clear and convincing evidence.

2. If one prior art reference completely embodies the same process or product

as any claim, the product or process of that claim is anticipated by the prior art, and that

Response to Office Action Attorney Docket No. 020431.1055 Serial No. 09/992,283 Page 22 of 29 claim is invalid. To decide whether anticipation exists, one must consider each of the

elements recited in the claim and determine whether all of them are found in the particular

item alleged to be anticipating prior art.

3. There is no anticipation unless every one of those elements is found in a

single prior publication, prior public use, prior invention, prior patent, prior knowledge or

prior sale. One may not combine two or more items of prior art to make out an

anticipation. One should, however, take into consideration, not only what is expressly

disclosed or embodied in the particular item of prior art, but also what inherently occurred

in its practice.

4. There cannot be an accidental or unrecognized anticipation. A prior

duplication of the claimed invention that was accidental, or unrecognized, unappreciated,

and incidental to some other purpose is not an invalidating anticipation.

Those four requirements must be kept in mind and applied to each kind of

anticipation in issue. The following additional requirements apply to some categories of

anticipation.

3.

1. Prior Knowledge: An invention is anticipated if it was known by others in the

United States before it was invented by the patentee. "Known," in this context, means

known to the public. Private knowledge, secret knowledge or knowledge confined to a

small, limited group is not necessarily an invalidating anticipation. Things that were known

to the public only outside the United States are not invalidating anticipation.

2. Prior Use: An invention is anticipated if it was used by others before it was

invented by the patentee, or more than one year before the patentee filed his patent

application. "Use," in this context, means a public use.

Prior Publication: A patent is invalid if the invention defined by the claims

was described in a printed publication before it was invented by the patentee or more than

one year prior to the filing date of his application. For a publication to constitute an

anticipation of an invention, it must be capable, when taken in conjunction with the

knowledge of people of ordinary skill in the art, of placing the invention in the possession

of the reader. The disclosure must be enabling and meaningful. In determining whether the disclosure is complete, enabling, and meaningful, one should take into account what

would have been within the knowledge of a person of ordinary skill in the art at the time,

and one may consider other publications that shed light on the knowledge such a person

would have had.

4. Prior Patent: If the invention defined by the claims was patented in the

United States or a foreign country, either before it was invented by the inventor or more

than one year before the inventor filed his patent application, then the invention was

anticipated. The effective date for this type of anticipation is the date on which two things

co-existed: (i) the owner of the referenced patent had the right to enforce that patent; and

(ii) the reference patent was available to the public. What was "patented" in the reference

patent is determined by what is defined by its claims, interpreted in the light of the general

description.

5. On Sale: A patent is invalid if the invention claimed in it was on sale in the

United States more than one year prior to the application filing date.

6. <u>Prior Invention</u>: If the invention defined by the claims was invented by

another person, in the United States, before it was invented by the inventor, and that other

person did not abandon, suppress, or conceal the invention, the invention lacks novelty. A

prior invention, even if put in physical form and shown to produce the desired result, is not

an invalidating anticipation unless some steps were taken to make it public. However, it is

not necessary that the inventor had knowledge of that prior invention.

7. <u>Prior U.S. Application</u>: A patent is invalid for lack of novelty if the invention

defined by the claims was described in a United States patent issued on a patent

application filed by another person before the invention was made by the inventor. The

effective date of a prior application for purposes of this issue is the date on which it was

filed in the United States. Foreign-filed patent applications do not apply. If the issued

United States patent claims the benefit of more than one United States application, its

effective date as an anticipation is the filing date of the first United States application that

discloses the invention claimed in that referenced patent.

Experimental Use Exception: The law recognizes that it is beneficial to permit the

inventor the time and opportunity to develop his invention. As such there is an

"experimental use" exception to the "public use" and "on sale" rules. Even though the

invention was publicly used or on sale, more than one year prior to the application filing

date, that does not invalidate the patent, provided the principal purpose was experimenta-

tion rather than commercial benefit. If the primary purpose was experimental, it does not

matter that the public used the invention or that the inventor incidentally derived profit from

it.

When a public use or sale is shown, the burden is on the inventor to come forward

with evidence to support the experimental use exception. Only experimentation by or

under the control of the inventor qualifies for this exception. Experimentation by a third

party, for its own purposes, does not qualify for this exception. Once the invention leaves

the inventor's control, its use is a public one, even if further experimentation takes place.

The experimentation must relate to the claimed features of the invention. And it

must be for the purpose of technological improvement, not commercial exploitation. If any

commercial exploitation does occur, it must be merely incidental to the primary purpose of

experimentation. A test done primarily for marketing, and only incidentally for

technological improvement, is a public use.

REJECTION UNDER 35 U.S.C. § 103(a):

Claims 2, 13, and 24 stand rejected under 35 U.S.C. § 103(a) over *Heinrich* in view

of Bowman. Claims 8, 19, and 30 stand rejected under 35 U.S.C. § 103(a) over Heinrich

in view of the Examiner's Official Notice.

The Applicants respectfully submit that the amendments to independent Claims

1, 12, 23 and 34 have rendered moot the Examiner's rejection of dependent Claims

2, 8, 13, 19, 24, and 30 and the Examiner's arguments in support of the rejection of

these claims. Dependent Claims 2, 8, 13, 19, 24, and 30 depend from amended

independent Claims 1, 12, and 23 and are therefore considered to be in condition for

Response to Office Action Attorney Docket No. 020431.1055 Serial No. 09/992,283 Page 25 of 29 allowance for at least the reason of depending from an allowable claim. In addition, the

Applicants respectfully submit that Heinrich or Bowman, either individually or in

combination, fails to disclose, teach, or suggest each and every element of Claims 2, 13,

and 24. The Applicants further respectfully submit that *Heinrich* or the Examiner's Official

Notice, either individually or in combination, fails to disclose, teach, or suggest each and

every element of Claims 8, 19, and 30. Thus, the Applicants respectfully traverse the

Examiner's obvious rejection of Claims 2, 8, 13, 19, 24, and 30 under 35 U.S.C. § 103(a)

over the proposed combination of *Heinrich*, *Bowman*, and the Examiner's Official Notice,

either individually or in combination.

The Applicants Claims are Patentable over the Proposed Heinrich-Bowman-Official-

Notice Combination

The Applicants respectfully submit that amended independent Claim 1 is

considered patentably distinguishable over the proposed combination of Heinrich,

Bowman, and the Examiner's Official Notice. This being the case, independent Claims 12,

23, 34, and 35 are also considered patentably distinguishable over the proposed

combination of *Heinrich*, *Bowman*, and the Examiner's Official Notice.

With respect to dependent Claims 2, 8, 13, 19, 24, and 30: Claims 2 and 8 depend

from amended independent Claim 1; Claims 13 and 19 depend from amended

independent Claim 12; and Claims 24 and 30 depend from independent Claim 23. As

mentioned above, each of independent Claims 1, 12, 23, 34, and 35 are considered

patentably distinguishable over Heinrich, Bowman, and the Examiner's Official Notice.

Thus, dependent Claims 2, 8, 13, 19, 24, and 30 are considered to be in condition for

allowance for at least the reason of depending from an allowable claim.

For at least the reasons set forth herein, the Applicants respectfully submit that

Claims 2, 8, 13, 19, 24, and 30 are not rendered obvious by the proposed combination of

Heinrich, Bowman, and the Examiner's Official Notice. The Applicants further respectfully

submit that Claims 2, 8, 13, 19, 24, and 30 are in condition for allowance. Thus, the

Applicants respectfully request that the rejection of Claims 2, 8, 13, 19, 24, and 30 under

35 U.S.C. § 103(a) be reconsidered and that Claims 2, 8, 13, 19, 24, and 30 be allowed.

THE LEGAL STANDARD FOR OBVIOUSNESS REJECTIONS UNDER 35 U.S.C. § 103:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991); M.P.E.P. § 2142. Moreover, all the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974). If an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious. In re Fine, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988); M.P.E.P. § 2143.03.

With respect to alleged obviousness, *there must be something in the prior art as a whole to suggest the desirability*, and thus the obviousness, of making the combination. *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561 (Fed. Cir. 1986). In fact, the absence of a suggestion to combine is dispositive in an obviousness determination. *Gambro Lundia AB v. Baxter Healthcare Corp.*, 110 F.3d 1573 (Fed. Cir. 1997). The mere fact that the prior art can be combined or modified does not make the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990); M.P.E.P. § 2143.01. The consistent criterion for determining obviousness is whether the prior art would have suggested to one of ordinary skill in the art that the process should be carried out and would have a reasonable likelihood of success, viewed in the light of the prior art. Both the suggestion and the expectation of success must be founded in the prior art, not in the Applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991; *In re O'Farrell*, 853 F.2d 894 (Fed. Cir. 1988); M.P.E.P. § 2142.

A recent Federal Circuit case makes it clear that, in an obviousness situation, the prior art must disclose each and every element of the claimed invention, and that any motivation to combine or modify the prior art must be based upon a suggestion in the prior art. *In re Lee*, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002). Conclusory statements regarding common knowledge and common sense are insufficient to support a finding of obviousness. *Id.* at 1434-35.

CONCLUSION:

In view of the foregoing amendments and remarks, this application is considered to

be in condition for allowance, and early reconsideration and a Notice of Allowance are

earnestly solicited.

Although the Applicants believe no fees are deemed to be necessary; the

undersigned hereby authorizes the Director to charge any additional fees which may be

required, or credit any overpayments, to **Deposit Account No. 500777**. If an extension of

time is necessary for allowing this Response to be timely filed, this document is to be

construed as also constituting a Petition for Extension of Time Under 37 C.F.R. § 1.136(a)

to the extent necessary. Any fee required for such Petition for Extension of Time should

be charged to **Deposit Account No. 500777**.

Please link this application to Customer No. 53184 so that its status may be

checked via the PAIR System.

Respectfully submitted,

30 August 2007

Date

/Steven J. Laureanti/signed

Steven J. Laureanti, Registration No. 50,274

BOOTH UDALL, PLC

1155 W. Rio Salado Pkwy., Ste. 101

Tempe AZ, 85281

214.636.0799 (mobile)

480.830.2700 (office)

480.830.2717 (fax)

steven@boothudall.com

CUSTOMER NO. 53184